



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/666,387	09/18/2003	Dennis Brandon	28396-6	7522
44777	7590	10/12/2005		
W. EDWARD RAMAGE COMMERCE CENTER SUITE 1000 211 COMMERCE ST NASHVILLE, TN 37201			EXAMINER KOVACS, ARPAD F	
			ART UNIT	PAPER NUMBER
			3671	

DATE MAILED: 10/12/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/666,387

Applicant(s)

BRANDON, DENNIS

Examiner

Árpád Fábián Kovács

Art Unit

3671

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 28 September 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 20-24, 26-40 is/are pending in the application.
- 4a) Of the above claim(s) 20-24 and 33-40 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 26-30, 32 is/are rejected.
- 7) ☒ Claim(s) 31 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

DETAILED ACTION

*Claim Rejections - 35 USC § 102*

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 26-28, 30 are rejected under 35 U.S.C. 102(b) as being anticipated by Nannen (5906051).

Nannen discloses:

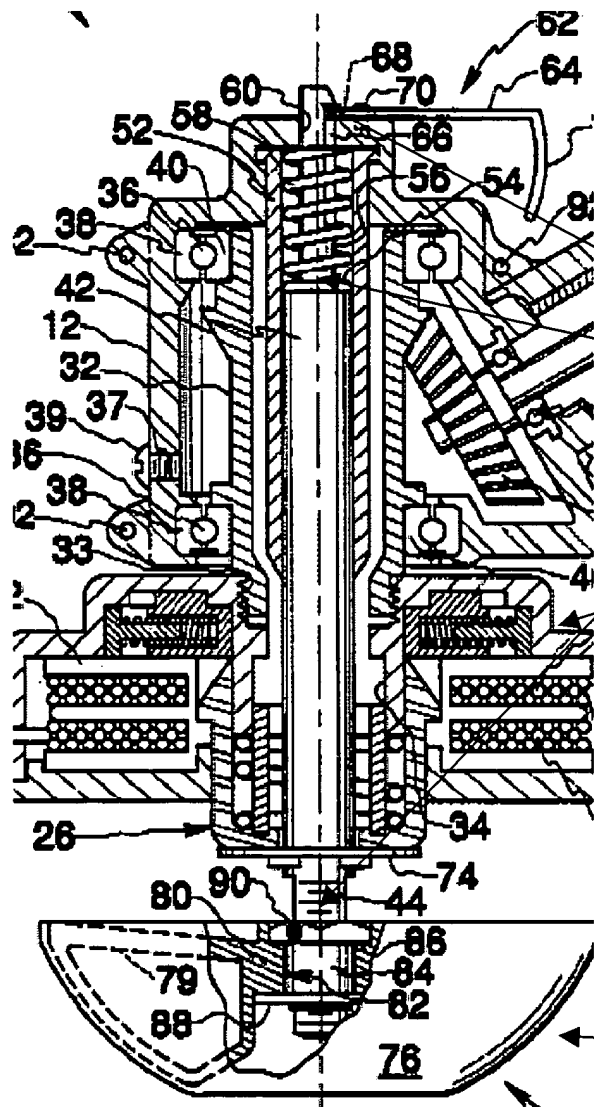
in re claim 26:

a spindle housing & shaft & a string carrier for a cutting element (col. 3, ln. 49-52);

a mow ball rotatably connected to one end of the shaft (ground guide 50, col. 4, ln 64-67, col. 5, ln 1-4);

further features as shown below:

Art Unit: 3671



Grooved spindle shaft: an elongated keyway ref 66 in the reduced portion ref 56, adjustably connects the carrier assembly, as it is between the spindle housing & mow ball

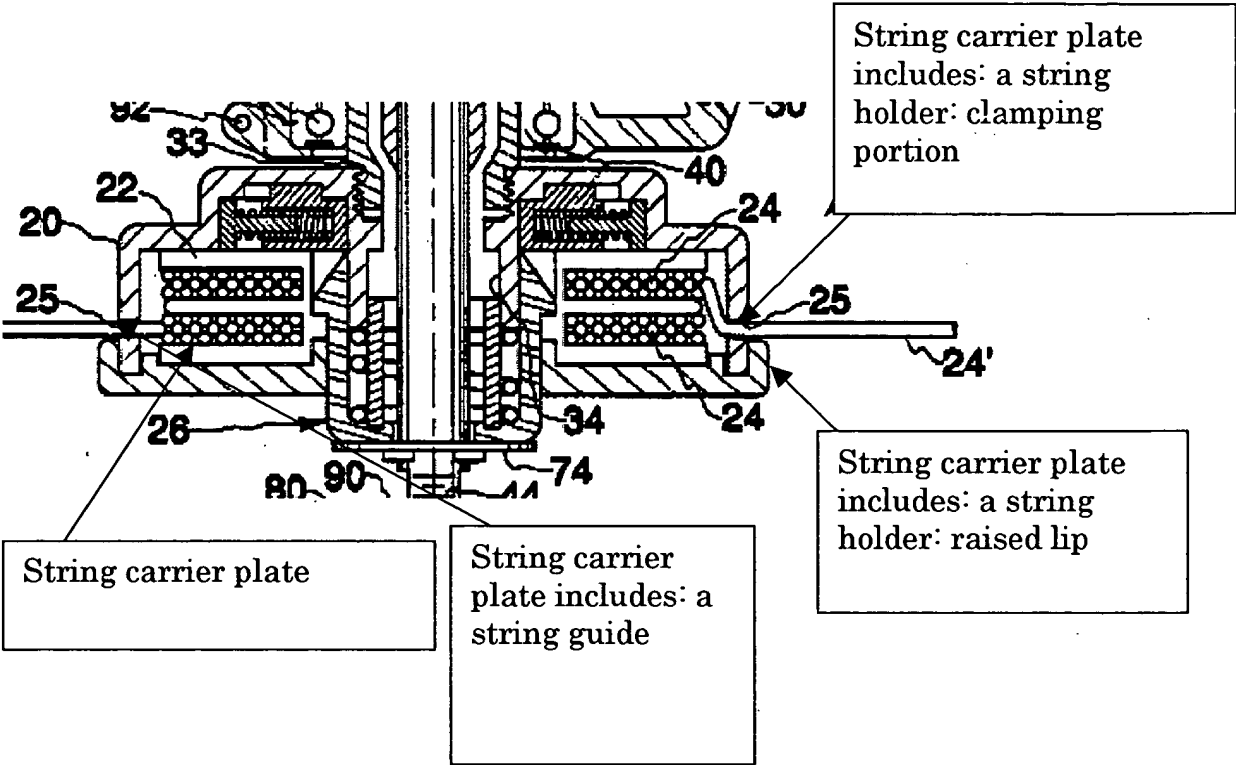
Spindle housing

A string carrier

Mow ball

Art Unit: 3671

in re claims 27-28, 30:



Art Unit: 3671

3. Claims 26-28, 30 are rejected under 35 U.S.C. 102(b) as being anticipated by Harb (6052974).

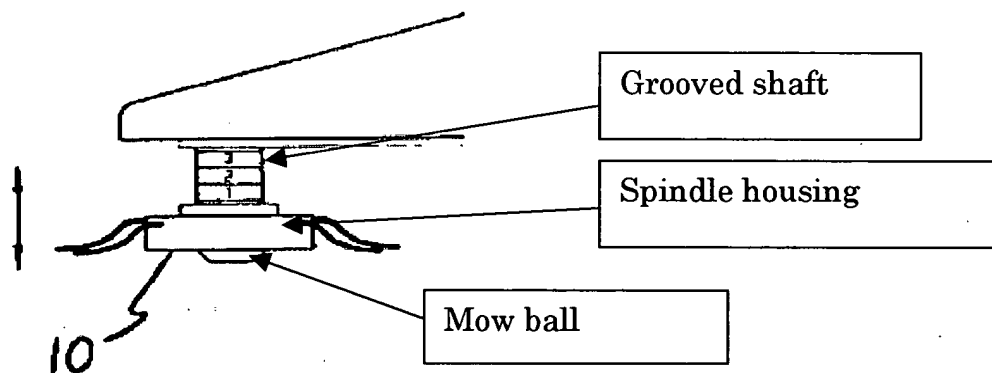
Harb discloses:

In re claims 26:

a spindle housing (10);

a grooved shaft or hub (12) rotatably coupled to the spindle housing;

a mow ball is shown at the lower end of the hub, however the rotatable connection between the hub/shaft to the mow ball is inherent (similar structure as in Nannen above);



a string carrier assembly (14) connected to the spindle shaft/hub intermediate the spindle housing and the mow ball (see fig 3);

Art Unit: 3671

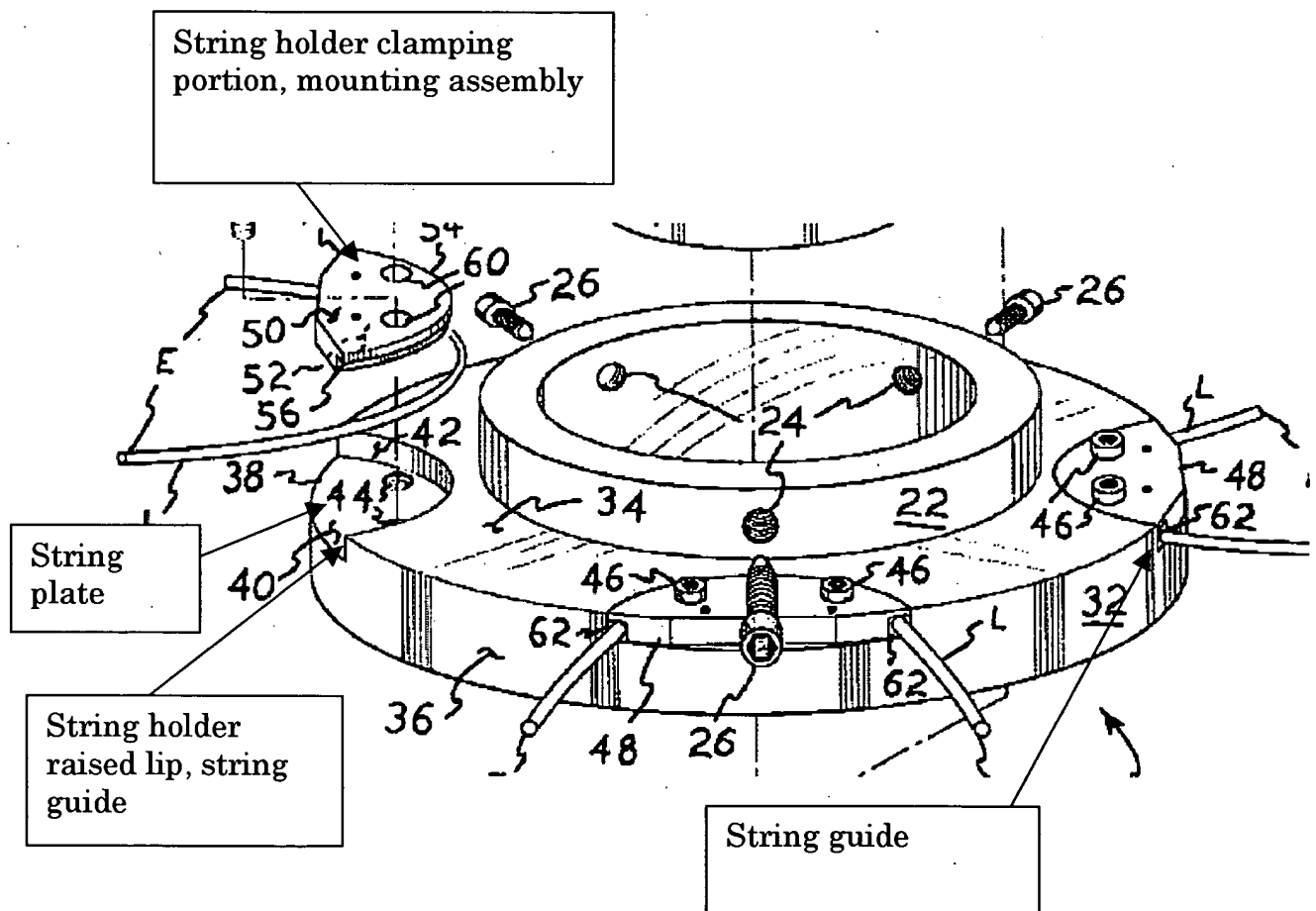
In re claims 27-28, 30:

a string carrier plate, string guide, & strong holder: raised lip & clamping portion:

the string holder includes a raised lip portion (the upper part of 48) and a clamping portion (56);

the carrier assembly includes a mounting assembly (45) and a carrier plate (32);

the plate includes a string guide (between 56 & 42) and a string holder (48);



Art Unit: 3671

4. Claims 26-30, 32 are rejected under 35 U.S.C. 102(b) as being anticipated by Sweet (4205439).

Sweet discloses:

in re claim 26:

a spindle housing (generally shown on fig 21, ref 139);

the spindle shaft is grooved & intermediate the spindle housing & mow ball (fig 13);

a spindle shaft (154);

a pulley (167) at one end of the shaft (see fig 13);

a mow ball (see the lower part of ref. 251, where the actual ball shape is shown) rotatably connected to a second end of the spindle shaft (see fig 22, at the second end of the shaft at ref. 158);

a string carrier plate (75) connected to the spindle shaft intermediate the spindle housing and the mow ball (see fig 21);

in re claims 27-28, 30:

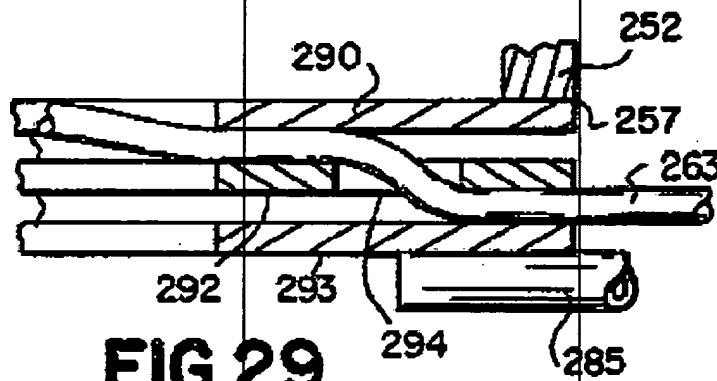
the plate includes a string guide (294) and a string holder (293 or 290; also see col. 11, lines 53-59), raised lip portion, a clamping portion (generally shown in fig 27), v-shaped openings for holding string (fig 22, near ref 257);



Art Unit: 3671

in re claim 29:

as best shown on fig 29, the design choice shape of the holder is unitary s-shaped (based on the shape of the string element).

**FIG. 29.**

Holder is shaped between this area, raised lip shown in biased state (cl.

Art Unit: 3671

in re claim 32:

a pulley (167) connected to a second of the spindle shaft (fig 13).

*Allowable Subject Matter*

5. Claim 31 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

*Response to Arguments*

6. Applicant's arguments filed 7/5/2005 have been fully considered but they are not persuasive.

Firstly, it is noted that the amendment made to claim 26, specifically: "string carrier assembly adjustably connected to the spindle shaft by means of said grooves intermediate the spindle housing and the mow ball" was not recited in previous recitation (claims 20 and dependent claim 26), since it was recited as: "the string carrier assembly is ... intermediate the spindle housing and the mow ball."

Therefore, a new consideration was made in view of the change, and it was found, as detailed above, that the groove is between the mow ball (at the lower end of the shaft) and the spindle housing (which is around the shaft).

Applicant's argument that Nannen does not teach "a grooved spindle shaft or a string carrier assembly adjustably connected to the spindle shaft by means of said grooves intermediate the spindle housing and the mow ball" is not agreed with, since as shown above without the groove string carrier could not be adjustably supported, it requires the grooved spindle shaft to prevent the carrier plate sliding off of the shaft, the plate (ref 64) allows adjustment in the groove.

Applicant's argument that Nannen does not set forth the elements of claims 27-28, 30 is incorrect, as shown above all the elements are identified.

Art Unit: 3671

Applicant's argument that Harb does not set forth a grooved shaft is incorrect, as also the Applicant pointed out the grooves/holes provide for the adjustable connection.

Applicant's argument that Sweet does not provide for a grooved spindle spindle shaft as shown by the grooves ref 54, fig 5 & 6, of the Applicant's invention, there can be no comparison made based on the figures, instead the claim language, i.e. "grooved spindle shaft," should be considered, it is clear from fig. 13, that is at least one groove shown that connects the spindle shaft to the string carrier assembly (75).

Applicant's argument that Sweet does not provide for the amended "unitary" limitation, is defined by 10<sup>th</sup> Edition of Merriam Webster's Collegiate Dictionary as "having the character of a unit," therefore, the cupped shaped member (251) described does have the S-shaped feature as shown above.

*Election/Restrictions*

7. Applicant's election with traverse of claims 26-32 in the reply filed on 9/28/2005 is acknowledged. The traversal is on the ground(s) that "it would not be unduly burdensome to include all disclosed variations of the spindle shaft assembly in a single application." This is not found persuasive because the Examiner finds that it would be burdensome to search and examine each embodiment.

The requirement is still deemed proper and is therefore made FINAL.

*Conclusion*

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

9. **THIS ACTION IS MADE FINAL**. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory


Art Unit: 3671

action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Árpád Fábián Kovács whose telephone number is 571 272 6990. The examiner can normally be reached on Mo-Th.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas B. Will can be reached on 571 272 6998. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Árpád Fábián Kovács  
Primary Examiner  
Art Unit 3671

ÁFK